

IN THE CLAIMS:

1. (currently amended) A method of producing a modified fiber product selected from printing paper and packaging material, according to which method

- cellulosic ~~raw material~~ pulp is formed into a fiber suspension which consists essentially of, as the fiber component, cellulose pulp fibers,
- components modifying the properties of fibers are added to the fiber suspension and
- the fiber suspension is introduced to a paper machine and formed into a web,

characterized in that

- ~~an alkyl derivative of cellulose selected from alkali soluble carboxymethyl cellulose~~ carboxymethylcellulose, the DS of which is 0.1 to 0.4 and the polymerization degree of which is about 600-5000, is dissolved in an alkaline solution and then mixed into the fiber suspension at alkaline conditions, and
- ~~the derivative is allowed to be~~ at least 10% of the carboxymethylcellulose is bonded to the cellulose pulp fibers prior to the cellulose pulp fibers being formed into a web so that the bonded ~~cellulose derivative~~

carboxymethylcellulose can not be washed off with water, to produce a modified fiber product having strength suitable for printing paper and packaging material.

2-5. (cancelled)

6. (previously presented) A method according to claim 1, characterized in that the pH value of the fiber suspension is more than 8.

7. (currently amended) A method according to claim 1, characterized in that the fiber suspension is mixed with the alkali soluble ~~carboxymethyl cellulose~~ carboxymethylcellulose for at least 5 minutes before drying.

8-9. (cancelled)

10. (currently amended) A method according to claim 8, characterized in that the DS of the alkali soluble ~~carboxymethyl cellulose~~ carboxymethylcellulose is 0.2-0.4.

11. (cancelled)

12. (currently amended) A method according to claim 1, characterized in that about ~~[[10 %]]~~ 10%, at the most, of the alkali soluble ~~carboxymethyl cellulose~~ carboxymethylcellulose can be washed off the treated cellulose pulp fibers at a temperature of ~~[[25 C]]~~ 25 °C and a neutral pH value.

13. (currently amended) A method according to claim 1, characterized in that in comparison with untreated paper, the same internal bond strength is achieved while using at least ~~[[10 %]]~~ 10% less cellulose pulp fibers.

14. (currently amended) A method according to claim 1, characterized in that the alkali soluble ~~carboxymethyl cellulose~~ carboxymethylcellulose is contacted with the cellulose pulp fibers in an alkaline flow of a pulp or paper mill.

15. (currently amended) A method according to claim 14, characterized in that the alkali soluble ~~carboxymethyl cellulose~~ carboxymethylcellulose is contacted with the cellulose pulp fibers in an alkaline bleaching stage.

16. (currently amended) A method according to claim 15,

characterized in that the alkali soluble ~~carboxymethyl cellulose~~
carboxymethylcellulose is contacted with the cellulose pulp fibers
in the peroxide bleaching of mechanical pulp.

17. (currently amended) A method according to claim 16,
characterized in that the alkali soluble ~~carboxymethyl cellulose~~
carboxymethylcellulose is first contacted with chemical pulp,
subsequent to which the pulp is drained and the filtrate is
introduced to the peroxide bleaching of mechanical pulp.

18. (currently amended) A method according to claim 14,
characterized in that the alkali soluble ~~carboxymethyl cellulose~~
carboxymethylcellulose is mixed with the cellulose pulp fibers
subsequent to the beating of fibers.

19. (currently amended) A method according to claim 1,
characterized in that the web forming is performed without an
intermediate drying of the fiber suspension after ~~adsorption~~ bonding
of the alkali soluble ~~carboxymethyl cellulose~~
carboxymethylcellulose.

20. (currently amended) A method according to claim 1,

characterized in that the amount of alkali soluble ~~carboxymethyl cellulose~~ carboxymethylcellulose is 0.1 to 5 % by weight of the cellulose pulp fibers.

21. (canceled)

22. (currently amended) A method according to claim 1, characterized in that the alkali soluble ~~carboxymethyl cellulose~~ carboxymethylcellulose is allowed to be ~~sorbed~~ bonded to the cellulose pulp fibers from the water phase so that at least 20% of the alkali soluble ~~carboxymethyl cellulose~~ carboxymethylcellulose contained by the water phase is allowed to be ~~sorbed~~ bonded to the cellulose pulp fibers.

23. (currently amended) A method according to claim 1, characterized in that the alkali soluble ~~carboxymethyl cellulose~~ carboxymethylcellulose is allowed to be ~~sorbed~~ bonded to the cellulose pulp fibers from the water phase so that at least 30% of the alkali soluble ~~carboxymethyl cellulose~~ carboxymethylcellulose contained by the water phase is allowed to be ~~sorbed~~ bonded to the cellulose pulp fibers.

24. (previously presented) A method according to claim 1, characterized in that the pH value of the fiber suspension is more than 10.

25. (currently amended) A method according to claim 1, characterized in that the fiber suspension is mixed with the alkali soluble ~~carboxymethyl cellulose~~ carboxymethylcellulose for at least 10 minutes before drying.

26. (currently amended) A method according to claim 1, characterized in that the fiber suspension is mixed with the alkali soluble ~~carboxymethyl cellulose~~ carboxymethylcellulose for at least 20 minutes before drying.

27. (currently amended) The method according to claim 1, wherein the alkali soluble ~~carboxymethyl cellulose~~ carboxymethylcellulose is bonded to the cellulose pulp fibers at a pH of about 7 to 10.

28. (previously presented) The method according to claim 1, wherein the treated fiber suspension is filtered and washed subsequent to ~~sorption~~ bonding, before introducing the fiber suspension to the paper machine.